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ABSTRACT

This report describes the Ypsilanti Preschool Curriculum Demonstration Project, a 5-year program conducted to assess the efficacy of preschool intervention for culturally disadvantaged children diagnosed as functionally retarded. Five groups of 3- and 4-year-olds participated in the program or served as controls. The project served as a source of data for research on different types of preschool intervention and as a center for dissemination of information to teachers, administrators, and researchers in education. The curricula included: (1) a cognitively oreiented curriculum based primarily on Piaget's principles of cognitive development, the principles of sociodramatic play and impulse control suggested by Smilansky, and some specially developed language techniques; (2) a language training curriculum emphasizing learning of academic skills including arithmetic and reading; and (3) a unit-based curriculum emphasizing the social-emotional development goals of the traditional nursery school programs. The preschool sessions were supplemented with home visits. The results for the first two years of operation (1967-69) demonstrated that children may profit from any structured curriculum which offers a wide range of experience and individual student attention. (AJ)

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YPSILANTI PRESCHOOL CURRICULUM

DEMONSTRATION PROJECT

1968-1971

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PART 1

ABOUT PRESCHOOL EDUCATION AND THIS PROJECT

Preschool education for disadvantaged children has been the focus of considerable interest in the past several years, and the effort to provide broad services to such children has been a part of national policy since 1965. Great expectations for the impact of preschool education upon the development of participating children have been encouraged by school personnel and others associated with the current movement. There is a need for more long-term research studies if such optimism is to find realistic support. In addition, specific curriculum methodologies are relatively uncommon, and successful projects are plagued by inability to successfully replicate their programs elsewhere (a critical problem in educational innovation). In spite of all the uncertainties, however, the indications are that preschool education does offer an important chance to assist the disadvantaged child.

There is growing evidence that compensatory education for elementary and secondary school children is relatively ineffective. Both professionals and parents are gradually becoming aware of this fact, with disquieting results. Professional educators and psychologists are now openly pessimistic about the prospects for success with compensatory and remedial programs, and parents from minority groups are becoming increasingly outspoken in their criticism of the public schools and in their demands for action. They are determined that someone assume the blame for the years of waste of human potential when ivory-tower theorists wrestled with minutae and the education "establishment" promoted its own interests.

Assigning blame is one thing; assuming responsibility to develop ways of controlling the educational consequences of poverty is another. Interest in preschool intervention is high because this field holds out the promise of developing techniques that are not simply remedial patchwork but are, in an important sense, preventive. Early childhood seems to be the most promising time for effecting

desired changes in intellectual growth patterns, establishing a sound basis for academic learning, and thereby preventing the failure and frustration that are the result, partly, of the handicaps disadvantaged children bring with them to the public schools; for it is in infancy and early childhood that wide-ranging curiosity and an abundant will to learn are found almost universally.

Since 1962, research projects throughout the country have attempted to determine whether preschool intervention with three- and four-year-olds does indeed make a difference in later school performance. While the cumulative results from these projects offer little to cheer about, it does seem clear that the more structured the program, the greater the gains in immediate intellectual competence and, where follow-up data are available, in academic achievement. While further development of specifically programmed curriculum styles and assessment of various intervention methods against "no treatment" control groups are essential, investigation of the relative effectiveness of curriculum models now available is of equal importance. The preschool field has reached a point at which several theoretically divergent curricula may be pulled together in a controlled study to determine their relative impact upon the cognitive, social-emotional, and academic growth of the disadvantaged child. This has been the major purpose of this project.

ORIGINS OF THE PROJECT

The Curriculum Demonstration Project is, in part, an outgrowth of the Perry Preschool Project, a five-year effort (fall of 1962 through spring of 1967) conducted in the Ypsilanti Public School System to assess the efficacy of preschool intervention for culturally disadvantaged children diagnosed as functionally retarded. The intervention program developed over this five-year period for use with such children was oriented around cognitive goals, drawing heavily upon Jean Piaget's theory of mental growth and development. Five groupings of three- and four-year-olds participated in the program or served as controls.

The program developed for the Perry Preschool Project--the Cognitively Oriented Curriculum--has become one of the three demonstration curricula in the Demonstration Project. The other two are the Language Training Curriculum, based on and evolving

with the Bereiter and Engelmann program developed at the University of Illinois, and the Unit-Based Curriculum, modeled after the more traditional nursery school program and having as its principal focus the social and emotional growth of the child.

GENERAL PURPOSES

The Curriculum Demonstration Project, in addition to providing preschool experience for disadvantaged three- and four-year-olds, serves two broad purposes in the general field of education. On the one hand, it is the focus and source of research on different types of preschool intervention, and, on the other, it serves as a point for dissemination of information to the wider population of teachers, administrators, and researchers in education. This framework necessitates a "three-pronged" approach, directed toward (1) the children directly participating in the program, (2) the entire population of disadvantaged youngsters for whom this research is relevant, and (3) the large audience of educators and researchers to whom information concerning methods, teaching styles, activities, structuring of preschool classes, etc., is disseminated.

THE CURRICULA

The cognitively oriented curriculum, developed during the five years of the Ypsilanti Perry Preschool Project, is a carefully structured program based primarily on principles derived from Jean Piaget's work on cognitive development; it also employs principles of sociodramatic play and impulse control suggested by Sara Smilansky, and specially developed language techniques ("verbal bombardment" and language patterning, the latter adapted from the work of Bereiter and Engelmann).

The language training curriculum emphasizes learning of academic skills. This curriculum was developed by Bereiter and Engelmann at the University of Illinois. It is a task-oriented curriculum employing many techniques from foreign-language training and includes the teaching of arithmetic and reading. While this program was specifically developed for disadvantaged children, it has not been tried out on functionally retarded youngsters. The project employs the most recent material published for this program.

The unit-based curriculum emphasizes the social-emotional development goals of the traditional nursery school programs. The hallmarks of this curriculum are introduction of themes and material to acquaint the child with the wider environment, close attention to the individual social needs of each child, and a considerable degree of permissiveness in classroom operation.

HOME VISITS

Supplementing the preschool sessions are afternoon visits by the teachers to the children's homes. These visits are attempts to engage the mother in the process of her child's education. The home visits are structured to augment and extend the preschool activities, and they provide a unique opportunity to gear activities specifically to the individual child. The mother is included in these activities to the extent that she is willing or can be persuaded to participate. The teachers suggest activities that the mother can carry out with the child during the week and point out household activities involving the child that can be structured to include the goals of the curriculum.

Home visits are part of each of the three programs. The activities in the home are appropriate to the particular curriculum in which the child is participating.

HOW THE CHILDREN ARE SELECTED

The children who become part of the Curriculum Demonstration Project each year are selected from among those three- and four-year-olds in the Ypsilanti school district who are found to be both "culturally disadvantaged" and "educably mentally retarded." The contrast group is one of the five no-treatment control groups employed in the five-year Perry Preschool Project that preceded the Demonstration Project.

The index of cultural deprivation used to determine eligibility has three components:

(1) The father's occupation is rated on a four-point scale ranging from unskilled work to skilled work. If no father is present, the mother's occupation is used.

(2) The number of years of education completed by both mother and father is averaged, or, in the case of only one parent, the total number of years of education completed is used.

(3) Density in the home is calculated by dividing the number of rooms in the home by the number of people in the home; this ratio is then multiplied by one-half to give this third component half the weight of the other two components.

"Score" distributions for each of these components are roughly standardized by dividing each component by its standard deviation. These scores are then totaled for each family to give its cultural deprivation index. In the preliminary 1967-68 sample selection, the range of scores for families having preschool-age children was 5.3 to 16.8. The cutoff point was set at 11, and preschoolers from families with a cultural deprivation index of 11 or below were eligible on the first criterion of acceptance.

The children of families scoring at or below the cutoff point of the cultural deprivation index are then given the Stanford-Binet intelligence (I.Q.) test, and their score on this is the second criterion of acceptance. Those testing as educably mentally retarded (usually an I.Q. of less than 85) can be accepted into the program; the only stipulation is that there be no major organic factor apparent in their diagnosed retardation. The children chosen are divided equally according to race, sex, and age. They are randomly assigned to the three demonstration programs. There are about 16 children in each program this year.

The assumption governing the use of the two criteria of acceptance--cultural deprivation and a diagnosis of "educably mentally retarded"--is that the child in our preschool program is a victim of poverty not heredity and that he <u>can</u> be educated.

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PART 2

THE DEMONSTRATION CURRICULA

COGNITIVELY ORIENTED CURRICULUM

The developmental theory of Jean Piaget provides the foundation for the Cognitively Oriented Curriculum. Spanning over forty years of research, this evolving theory is best viewed as the framework from which the curriculum is adapted;the specific items and activities in the curriculum are derived by the preschool teachers and staff from this theoretical base.

The main premise underlying the Cognitively Oriented Curriculum is that there cannot be a basic understanding of self and world without the ability to place the self in time and space and to classify and order objects and events. This means that two kinds of capabilities have to be developed by the child. First, the child must begin to make connections among objects, among events, and between objects and events; that is, he must construct relationships among the things in his environment and then expand his system of relationships into an organized way of dealing with the world. Second, the child must begin to construct mental representations of himself and of his environment and to deal with these representations in increasingly complex and abstract ways. The two are complementary: the ability to construct and make use of relationships goes hand in hand with the ability to construct meaningful representations.

LEVELS OF SYMBOLIZATION. In the formation of meaningful representations in ever increasing degree of abstractness, Piaget has outlined four levels of symbolization: object level, index level, symbol level, and sign level. These are ordered in terms of their degree of complexity and abstractness, the object level being the most simple and concrete, the sign level the most complex and abstract.

At the object level, the child's representations are in terms of identifying and naming concrete objects. In this case, the child simply assigns labels or names to specific, directly perceptible objects.

At the index level, the child begins to deal with parts of objects as being representative of the whole, and with certain cues which can be taken as representative of the objects. The cues the child has to deal with are often marks or sounds which are causally related to the objects and therefore indicative or representative of them. To infer "duck" from duck footprints or "telephone" from the sound of a ringing telephone are examples of representing objects given less than complete physical evidence of their existence or presence.

At the symbol level, the child is able to deal with representations of objects that are distinct from the objects. In other words, the representations are not part of, or causally related to, the real objects but exist as separate entities so that the child must construct a link between the real object and the representation of it. Examples would be pictures--from the realistic (photographs) to the more abstract (line drawings)--and clay or plastic models (including those made by the child). Included at this level is the use of the body in representing objects or events (termed "motor encoding"), such as when a child hops like a rabbit or pretends to be a fire engine, and the use of objects to represent other objects (such as a block to represent a car).

The ultimate level in Piaget's outline of levels of symbolization is the sign level, or representation through words. While the child is able to use and respond to spoken words at the earlier levels of symbolization, written words are the most abstract means of representation, being a completely arbitrary configuration of marks in a particular shape and arrangement. The ability to represent objects and events at this level, that is, the ability to read and write, is not part of the focus of the Cognitively Oriented Curriculum; but in developing the child's ability to represent on increasingly abstract planes,the curriculum does provide the prerequisites to this ultimate level.

CONTENT AREAS. The Cognitively Oriented Curriculum has four content areas from which cognitive goals are derived: classification, seriation, temporal relations, and spatial relations. The breakdown is at times artificial since the areas tend to overlap in some instances, but it serves as a focus for the teachers and provides the core around which they organize the daily classroom and outdoor activities.

(1) Grouping, or classification, is approached first through having the child make functional and relational discriminations--things go together either because they are used for the same activity (e.g., a spoon and a fork go together because they are both used for eating) or because they are used in relation to one another (e.g., a hammer and a nail). More complex groupings are based on descriptive discriminations, that is, on certain attributes that can be perceived, such as size, shape, or color. The most abstract means of grouping is on the basis of gross discriminations (e.g., vehicles, furniture, and other such general categories).

(2) Ordering, or seriation, is approached through having the child deal with objects in terms of their relationships in size, quantity, or quality (e.g., rough/smooth, happy/sad). The preschool goal is to enable the child eventually to deal with four sizes and four quantities and with three qualities.

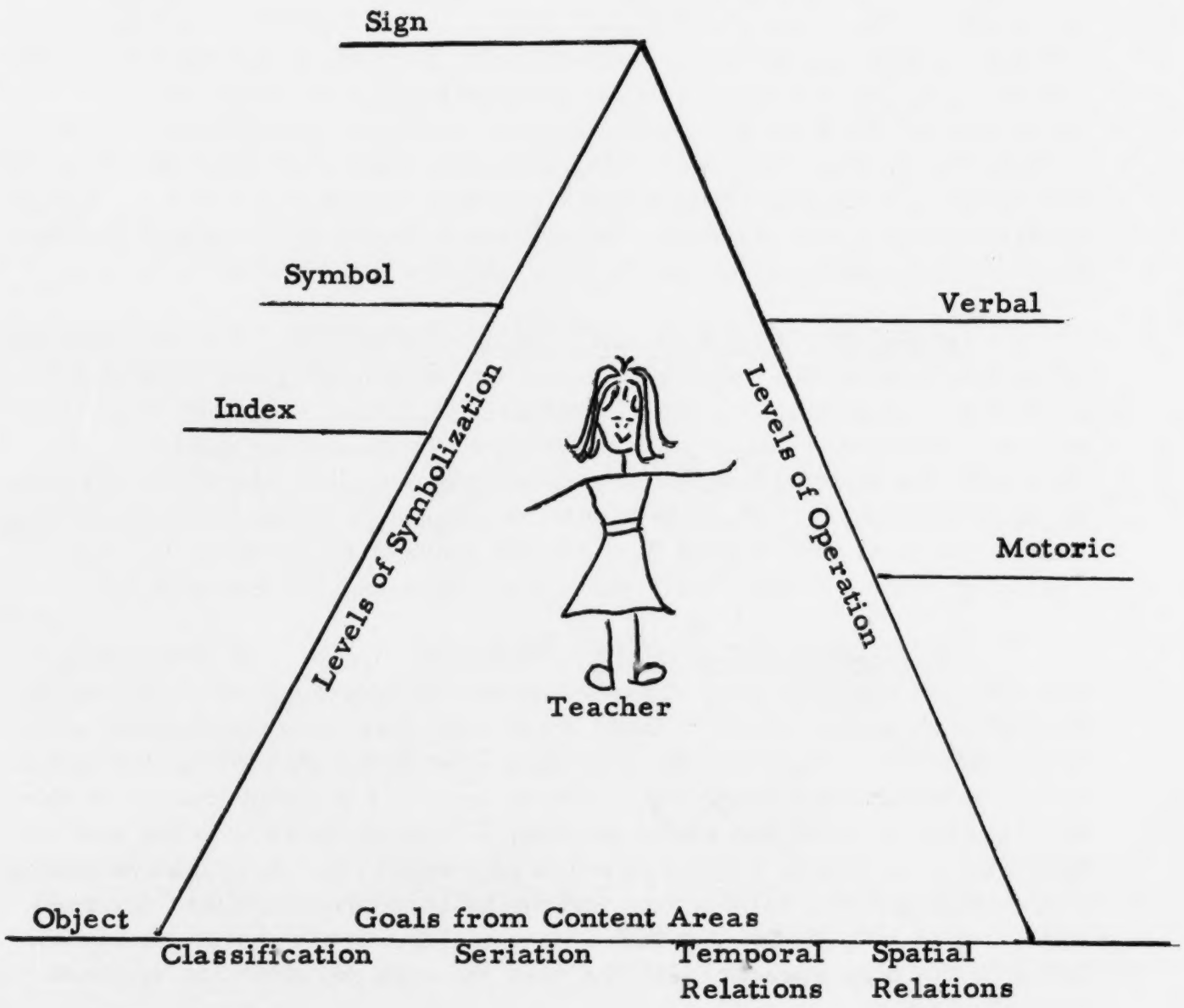
(3) How the child perceives himself in space and how he perceives relationships in space, or spatial relations, is approached through expressions of the orientation of the child's body and of other objects in space. Through motoric (i.e., physical) experience and later through verbal experience with concepts of position (e.g., in/out), direction (e.g., to/from), and distance (e.g., near/far), the child is expected to develop meaningful constructions of space and spatial relationships.

(4) To understand and respond to temporal relations, children begin to deal with time in terms of periods having a beginning and an end. They learn that events can be ordered chronologically and that time periods can be of variable length.

LEVELS OF OPERATION. Following Piaget, the Cognitively Oriented Curriculum is committed to the child's experiencing concepts on the motoric level of operation (i.e., with his body) and being involved in this direct physical manipulation of the environment at all levels of symbolization; involvement on the verbal level of operation is gradually added, but the motoric level is never entirely displaced. Motoric experience with concepts in part provides a base for later verbal experience. By using his body to experience concepts, to operate on objects, and to employ objects for operating on other objects, the child develops a "feel" for the concepts, and this facilitates verbal expression. For example, a child's motoric experience of "rolling" gives him a basis for generalizing to objects (e.g., a

ball rolling), and this experience in turn provides the basis for verbally dealing with the concept of rolling.

The cognitive goals of the curriculum are implemented along the levels of symbolization, into which the levels of operation are integrated. What this amounts to is a three-sided framework which the teacher uses in planning activities.



THE THREE-SIDED FRAMEWORK FOR PLANNING
IN A COGNITIVELY ORIENTED CURRICULUM

STRUCTURE OF THE CLASSROOM. The Cognitively Oriented program shares classroom space with the Unit-Based program, the two classes meeting at different times of the day. The classroom layout and equipment, then, are similar for the two programs, though the ways in which the equipment and areas are used are not the same. The Cognitively Oriented program has the room divided into four areas which are by and large separate and distinct: a large motor area for blocks, trucks, variplay climber, etc.; a small motor area (often referred to as the "quiet table") for puzzles, clay, and other small motor activities; a housekeeping area equipped with stove, refrigerator, tea table, dolls, etc.; and an art area. In each of these areas, the equipment and materials are specifically arranged so that the child's learning during the course of the year will tend to follow the path from the simplest to the most complex concepts involved in classification, seriation, temporal relations, and spatial relations. It is the teachers' responsibility to emphasize and extend activities as appropriate to individual children, taking into account the levels of symbolization and operation at which each child is functioning.

IMPULSE CONTROL AND DAILY ROUTINE. To increase the attention span of the child and to aid him in planning and executing self-selected activities, the Cognitively Oriented program seeks to help him bring his behavior more under his conscious control. To this end, the curriculum incorporates a three-part sequence suggested by Sara Smilansky. This sequence is planning, doing, and evaluating, and it has been formalized in the daily routine of the program as Planning Time, Work Time, and Group Meeting for Evaluation.

SOCIODRAMATIC PLAY. Planning, doing, and evaluating are also an implicit part of the cooperative role-playing referred to as "sociodramatic play." Sara Smilansky has outlined several criteria for true sociodramatic play that have been adopted by the teachers in the cognitive program. These are: (1) a child should be interacting with at least one other person; (2) make-believe roles are taken by each child; (3) these roles are expressed in imitative action and verbalization; (4) actions and verbalizations substitute for real objects and situations; (5) there is sustained verbal interaction related to the play episode; (6) the play episode persists for at least ten minutes.

The major goals in using sociodramatic play as a teaching device are to develop the concentration and attention skills of the child; to help him integrate scattered experiences; and to enable him to consider possibilities in his mind as well as with his hands, that is, to engage in "make-believe" rather than depend wholly on toys. These are important cognitive goals; through sociodramatic play, the child develops his ability to use symbols and broadens his comprehension of the relationships among things and events in his environment.

LANGUAGE TRAINING CURRICULUM

The Bereiter and Engelmann program of verbal instruction for disadvantaged children is the basis of the Language Training curriculum. This program has evolved from Bereiter and Engelmann's 1966 book Teaching Disadvantaged Children in the Preschool and has been supplemented and extended by Osborn and Gehlback's Teaching Guide and by consultations on a continuing basis with individuals involved in the original Bereiter-Engelmann program at the University of Illinois.

The Bereiter-Engelmann program has its roots in some rather common sense observations. For example, the child entering preschool has behind him many thousands of hours of development, while his stay in preschool will amount to about 500 hours; if any changes are going to be made in his life, whatever takes place in those 500 hours will have to be of maximum academic importance and relevance. And since "being behind" means that disadvantaged children must move faster than "advantaged" children simply to catch up, whatever takes place in the preschool should be concentrated and intensive as well as relevant.

It is important to keep two things in mind when examining the Language Training curriculum. First, the program was devised specifically for the disadvantaged child, and in this sense it is very different in scope from the Cognitively Oriented curriculum and the Unit-Based curriculum, which are conceived to be appropriate for any child. Second, Bereiter and Engelmann focus specifically on learning rather than on intelligence gains and developmental goals. This focus derives from their contention that disadvantaged children lack appropriate learning behaviors, not the ability to learn. Development and intelligence are not ignored, but they are of interest

only insofar as education can influence them, since education can have no effect on those aspects of a person's makeup that are not learned.

Bereiter and Engelmann point to fallacies in the reasoning behind what are called enrichment programs. The position these programs take, either explicitly or implicitly, is that, for disadvantaged children to "catch up" to advantaged children, they must have the same kinds of experiences advantaged children have; Bereiter and Engelmann propose that this objective can be reached by a different route (and with less confusion along the way). Another feature of enrichment programs is the great emphasis on nurture and warmth in the teacher-child relationship. Bereiter and Engelmann note that motherly affection is the only kind of adult affection that many disadvantaged children regularly receive. More appropriate in the preschool would be emphasis on relationships springing from other bases, such as mutual respect, shared intellectual interests and invested hopes, and fatherly pride; these are the kinds of relationships which disadvantaged children tend not to experience. The conclusion is that a preschool oriented toward learning tasks would be the ideal setting for the development of relationships with these characteristics.

For Bereiter and Engelmann, the chief indicator of cultural deprivation is a limited or incomplete use of language. They contend that disadvantaged children are quite capable of communicating and understanding desires and commands, since these do not require an elaborated verbal system, but that they are less successful in using language as a means of conveying information. Since this skill is basic to success in the academic world, it is this characteristic of deprivation that is the main focus of the Language Training program. Disadvantaged children tend to talk in phrases or, to use Bereiter and Engelmann's term, "giant words." Giant words are phrases that are used as single units and therefore cannot be broken down and recombined into new constructions. For example, a "privileged" child would be able, over a period of time, to construct complete sentences from fragments he had initially used, so that "read book" would become "Mommy, read book," "Mommy, read the book," "Mommy, read the book to me" ; the disadvantaged child would be likely to maintain the fragment in its original form, as one word: "re-hi-bo" (read the book). While this does not interfere with communicating demands or desires, it very definitely limits

one's ability to put sentences together for other purposes, according to whether one is trying to ask questions, to explain, to describe, or to compare.

SUBJECT AREAS AND GOALS. The curriculum is so designed that children learn the substitution property of language, that language is made up of discrete parts that can be rearranged and interchanged according to certain rules. Language here refers not only to the spoken word but also to the written word and, in a special sense, to arithmetic. Reading is taught by this same principle of substitution: the child learns that sentences and words are made up of discrete elements and that wholes are constructed by arranging the parts according to rules. Arithmetic is "language" in the sense that equations are made up of elements, and these elements can be substituted and interchanged according to certain rules.

These three subject areas--language, arithmetic, and reading --represent the fundamental academic skills taught in the Language Training curriculum. Since the same principles underlie the approach to each of these areas, the skills taught are mutually reinforcing. The explicit academic goals of the curriculum are:

(1) Development of the effective use of language, particularly the ability to use complete sentences.

(2) Development of the ability to perform if-then deductions.

(3) Development of the ability to sound out and read simple material.

(4) Development of the ability to count by rote, to count objects, and to identify numerals.

In addition to these specifically academic goals, certain developmental attributes are promoted: the ability to assimilate past experience and respond appropriately to new situations, the ability to attend to clearly defined tasks, and the intrinsic motivation that springs from the learning process.

The overall objective of the academic and developmental goals is to assure the child's success in school by fostering his self-esteem, his confidence in himself, through tangible achievements in preschool.

STRUCTURE OF THE CLASS DAY. One hour of each two-hour day is divided into three equal periods for language, reading, and arithmetic. The other hour is utilized for relatively unstructured activities, such as music and art, for getting settled at the beginning of the day, and for juice time. During the unstructured periods, the children are together in one group; during the study periods, they are divided into small groups, and a different subject is taught by each teacher and aide. This setting--the child's participation in a small group of peers--provides the child with the opportunity to develop group-related abilities and social skills.

UNIT-BASED CURRICULUM

The Unit-Based curriculum follows the traditional nursery school goals and techniques. The term "unit-based" reflects the teachers' use of broad units or themes (such as community helpers, circus animals, Thanksgiving) as a core around which to organize activities, discussions, and field trips.

The principal focus of this curriculum is the social and emotional growth of the child. Intellectual development is approached through "learning by experience," or "discovery through play," which includes using techniques to foster curiosity and creativity, experimenting with new materials, and experimenting with materials in new ways.

Use of this model with disadvantaged children has produced some modification in the application of the traditional nursery school teaching methods. It is a premise of the Unit-Based curriculum that disadvantaged children lack certain kinds of experiences; therefore, the teacher's role has been expanded from simply facilitating discovery to making specific attempts to counteract these experiential deficits. For example, the children in this program might be taken on a short bus ride in the fall just to look at the colored leaves--something, as one of the teachers has remarked, "the children just overlook unless it's pointed out to them."

There is more emphasis on verbal interaction in the Unit-Based program than in the cognitive or language program. This is because the teachers do more directing and explaining and also because, from the point of view of this program, disadvantaged children are less verbal than their "typical" middle class peers.

The structure that derives from these emphases extends rather than changes the nature of the traditional model. Thus the Unit-Based curriculum, like the traditional nursery school, is geared to individual needs, is "child-centered," but the youngster at the center is now the disadvantaged child. While the atmosphere in the classroom is relatively permissive, there are certain expectations about children's behavior in terms of manners, cooperation, and limits. The setting, then, is not unstructured; there is, instead, a loose structure within which there is much freedom for the children, particularly with regard to choosing activities, moving from one activity to another, and interacting with peers and teachers.

GOALS AND IMPLEMENTATION. The Unit-Based curriculum incorporates the loosely defined "basics" usually associated with nursery school education. Under the rubric "developing the entire child," there are a variety of objectives:

(1) Developing social skills, the ability to function in a group situation; cooperation and interaction are encouraged through sharing, taking turns, respecting the rights of others, and using "good manners."

(2) Learning motor skills, particularly large-motor skills, and gaining confidence in physical abilities.

(3) Developing manipulatory skills.

(4) Psychosexual development, specifically identification and sex role.

(5) Developing language skills, such as increasing vocabulary, speaking clearly, and using simple sentences.

(6) Developing the ability to follow simple school routines and to complete tasks.

(7) Improving auditory and visual discrimination and encouraging the enjoyment of music.

(8) Mental health goals--improving the child's self-concept, enhancing his self-esteem, encouraging his self-control, and helping him to build a healthy outlook in which dependence and independence are in balance.

Primary emphasis is given to the social goals; items 2, 3, and 4 are classed as developmental goals, and items 5, 6, and 7 are considered educational goals, since they relate directly to school work.

The teachers attempt to relate the activities to the general unit or theme chosen to implement the specific goals derived from these broad objectives. However, the teachers are not required to adhere strictly to their plans for activities but can innovate and change activities as they feel necessary. The unit approach not only provides the teachers with a focus for planning but also, and more importantly, provides the child with a constantly reinforced, extended, and blended approach to learning about the environment. The Unit-Based curriculum tends to focus on the child primarily as a social being, but this does not preclude cognitive, or intellectual, growth. Rather, this approach is seen as the means by which social-emotional growth is fostered, with intellectual growth following as a by-product.

PART 3

OPERATION OF THE PROGRAMS

CHARACTERISTICS THAT MAY INFLUENCE THE RESEARCH RESULTS

Several things that characterize the operation of all three programs would be expected to have some impact on the quality of the results. In fact, we consider the characteristics listed below, together with the staff model, to be prime determinants of the remarkable results of the project to date.

Involvement of the mother. Each of the three curricula includes home teaching as part of the program in order to actively involve the mother in the process of her child's education. While group meetings are held about once a month and some preschool observations are scheduled, the primary focus with parents is on the educational activities in the home. The mothers have responded well to these visits and have increased their participation throughout the period of preschool attendance by their youngsters. We feel that home teaching has provided strong support for the children's intellectual growth.

Focus on the child. In order to prepare for the 90-minute home teaching session, the teacher directs her attention to the particular problems of the child. Upon returning from the home, she writes a report on the visit documenting her observations. The home teaching sessions, therefore, provide an unusual opportunity for the teacher to focus on the learning problems of each child. This knowledge is carried over to the instructional program in the preschool classroom.

Focus on education. The project does not have professional staff other than teachers and research personnel. It does not offer social work services, health services, referrals to clinics and agencies, etc. The teachers and the project families see the teacher's role as clearly educational in nature. This single-purpose approach is practical in Southeastern Michigan, where the services of many agencies are readily available.

Language in the classroom. Essential to the operation of all three curricula is the heavy use of language in the classroom. While the method of language training varies greatly, in all the classes language is used extensively by the adults and is encouraged in the children.

Respect for the individual staff member. The project is operated as a group of professionals working to produce information. While this group operation ideal often breaks down, there is an attempt to keep all staff members in communication. Such interaction gives the staff members an actual part in the development of the total project. It also keeps the project "honest" by forcing all involved to consider all aspects of decisions.

Staff expectations for the children. Much has been said recently about the impact of motivational changes on preschool outcomes when assessed by standard tests. Impressive gains in test performance by children in early grades labeled as "bright" for teachers by outside researchers have been reported. Certainly, a portion of the total I. Q. and achievement gains of our children is the result of improved motivation--whose source is the optimism of the teachers regarding the effectiveness of their curricula and a genuine commitment on the part of the entire staff to the goals of the project.

Commitment. In order to meet the expectations of the project and to be effective in the classroom, the teachers must spend time over and above regular teaching time to stay ahead of the demands. Lunch hour, after school, "break" times, etc., are often spent preparing lessons, writing reports, and meeting with staff members and visitors. This type of involvement comes from a firm commitment to the program.

STAFF MODEL*

A research and demonstration project produces a fairly specialized environment for staff operation. Since this particular project is aimed at the study of relative curriculum impact, the way the staff operates is kept uniform for all three programs. Some of the most important components of the staff model are:

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*This model is presented in detail in Part 5.

Planning. Essential to the demonstration aspect of the project is that all three programs have clearly defined week-by-week goals. The curriculum implementation follows a carefully planned daily program designed by the teachers themselves to achieve the goals of each curriculum.

All teachers prepare lesson plans at least a week in advance. These plans are available to visitors and to supervisors and consultants working with the teachers. Planning forces the teacher to devote particular attention to the use of time in the classroom and to the goals of her curriculum. It provides opportunity for an ongoing review of curriculum effectiveness.

Team teaching. Two teachers are assigned to each curriculum model after they have had an opportunity to express a preference. Teaching aides (residents of the school district) are also assigned to each class. Together, the teachers plan activities and solve problems within the theoretical framework of their curriculum model. This team relationship permits mutual support for classroom problems and thus helps the teachers to focus more clearly on individual children and on authentic problems deriving from the curriculum model rather than management problems arising from a teaching overload.

Supervision. Each team of teachers is supervised by an experienced teacher who works with them to provide focus and to "referee" problems within the team. Rather than smooth over problems, the supervisor helps the teachers to face the issues and to work out solutions to problems within the theoretical framework of their curriculum model. While not authoritarian, the supervisor is clearly responsible for helping the teachers keep to the instructional problems at hand.

EVALUATION

Consultants representing a wide range of viewpoints on early and preschool education, remedial programs for the disadvantaged, and developmental psychology are brought to Ypsilanti twice a year to view the Demonstration Project in operation. These consultants present critiques and advice to the staff concerning the operation of the preschool classes, effectiveness of the curriculum models, methods of research, objectives of the study, and interpretation of results. Information and opinions are exchanged in meetings and seminars after the consultants have been briefed by research and teaching staff on all phases of the project.

PART 4

RESULTS AND DIRECTIONS OF THE PROJECT

Results of the project are available for the first two years of operation (1967-1969). The data are based on intelligence test scores, social-emotional and general developmental ratings by teachers, and systematic classroom observations by research staff.

In analyzing the data from intelligence tests, teacher ratings, and classroom observations, no statistically significant differences in results have been found between the programs. The gains recorded in intelligence tests are unusually high in all three programs. While long- term follow- up data on school achievement, social adjustment, and eventual disposition of I. Q. level are not available at this time, data from the five-year Perry Preschool Project indicate that children who show early and rapid intellectual growth (i.e., intelligence test gains) as a result of preschool intervention also show later social adjustment and academic achievement.

These results raise two critical questions: (1) Why are the intelligence-test-change scores so large? That is, why are I. Q. gains far above those usually reported in the literature? (2) Why are there no differences in impact between programs? In attempting to answer these questions, several characteristics of the project as a whole have been singled out (see Part 3, "Characteristics That May Influence the Research Results"). One possibly crucial variable whose impact can be measured is the home visit segment of the programs. This year, in an attempt to assess the significance of home teaching, the teachers will not visit the homes of the three-year-olds, so that only half the children in the project will have home teaching.

It appears that children may profit from any structured curriculum that is based on a wide range of experiences and that provides for close attention to the needs of individual children and involvement of the staff in the total operation.

This year, research and teaching staff are combining efforts to produce introductory and training films and other materials for teachers and administrators in preschool and compensatory programs. The audio-visual material will include instructional films on the three

demonstration curricula and short "concept" films illustrating various aspects of the Cognitively Oriented curriculum.

Experience this past summer in setting up programs based on the cognitive model has indicated a need for more effective training materials for teachers. In addition to the films and other audio-visual materials, each team of teachers will keep a detailed monthly record of their program documenting the goals, problems of implementation, modifications, progress of the children, etc. These records will be the basis for a comprehensive document on each curriculum.

PART 5

POSITION PAPER: AN OPERATIONAL MODEL FOR SUCCESSFUL PRESCHOOL PROGRAMS

THE ROLE AND PLACE OF CURRICULUM

Compensatory education for disadvantaged children is in serious difficulty today. Spawned in the late fifties by the emerging desire that social and educational equality, as well as political equality, be considered legitimate goals for a democratic society, and nourished by the resurgence of the environment-oriented interaction theory of intelligence, compensatory education was seen as an answer to the achievement problems facing large numbers of youth from lower socio-economic backgrounds: Pump in enough money, lower the teacher-pupil ratio, introduce new teaching techniques and new materials, be more responsive to the individual's needs for self-worth, and any child can become successful in an educational system offering the technology and skills required for entry into the successful working and middle class groups. But today, at the start of the seventies, assessments of the situation are uniformly pessimistic.

Until recently, the main goal in early education research was to develop the curriculum for optimally affecting the general development of the child. The basic reason behind the failure of compensatory preschool education was assumed to be the inadequacy of treatment methods. In general, the major differences among the various curricula offered for use in preschools have been in the focus and amount of structure and in how this structure is thought to affect the general development of the child.

The dominant view in the early education field is that of the traditional nursery school educators. This position is best characterized as child-centered and permissive. The teacher provides what structure there is through her intuitive grasp of the child's stage of development. The best examples of this method are found in the classes of master teachers; however, what a master teacher does to achieve her results is a matter of personal expression.

Another point of view is held primarily by researchers new to the early education field. This position is best characterized as oriented toward structured programming, and it is usually based on a specific educational theory. A theoretical position might be derived from Piaget or Guilford, for example, where the primary goals would be cognitive and language development. The typical structured program is a carefully sequenced presentation of teacher-planned activities. While some structured programs may utilize traditional nursery school materials and activities, others turn directly to the task of teaching reading, writing, and arithmetic without even a nod toward traditional nursery school format. The structure may be derived from the curriculum materials themselves as well as from teacher commitment to a specific set of educational methods. In a structured program, the teacher is generally expected to understand how the activities will be used to achieve predetermined goals, and her teaching methods may range from the more traditional social controls to the newer techniques of behavior modification.

Since 1962, there have been a number of structured preschool education programs in operation (Klaus and Gray, 1968; Karnes, et al., 1969; Deutsch, 1968; Hodges, McCandless, and Spicker, 1967; Spriegel, 1967; Weikart, 1967, 1970). These projects have followed different child development theories and have been organized around diverse teaching strategies. The central theme of each, however, has been the careful sequencing of activities. While these projects have not been uniformly successful, the data have been encouraging in terms both of their immediate measurable impact on general functional ability and long term gains in academic and social performance. While there is little theoretical agreement as to what constitutes a good nursery school program, systematic teaching appears to be essential.

In an effort to determine which of two well developed structured programs was most effective in meeting the needs of disadvantaged and functionally retarded children, the Ypsilanti Preschool Curriculum Demonstration Project was established in the fall of 1967. The programs selected were the cognitively oriented curriculum and the Bereiter-Engelmann language training curriculum. In order to complete the spectrum, a third program was established that would represent the traditional, or child-centered, approach to education. This is the unit-based curriculum, emphasizing the social-emotional goals and teaching methods of the traditional nursery school. (See Part 2 for a discussion of these curricula.)

Much to our surprise, each of the three programs did unusually well on all criteria. The findings indicated no differences among the three curricula on almost all of the many measures employed in program assessment; i.e., several intelligence tests (Stanford-Binet I.Q. gains by three-year-olds of 27.5, 28.8, and 30.2 points, for example, in the first year), classroom observations, observations in free play settings, ratings of children by teachers and independent examiners, and evaluations by outside critics. These data have now been replicated with essentially the same findings. The basic conclusion is that the operational conditions of an experimental project are far more potent in influencing the outcome than the particular curriculum employed. Specifically, we have derived four points regarding curriculum and the education of disadvantaged children.

The selection or development of a curriculum is a critical decision. A curriculum that is too easy or limited in scope will not challenge the teachers and will fail in its function of demanding the teachers' maximum effort. In the long run, it may be that the current focus on "script" type curricula by some structure-oriented curriculum developers will produce as sterile a range of programs as the traditional curriculum people have produced, since the teacher in such programs is not give the room to make the curriculum actively her own. As effective as some of these programs currently are, they must stand the test of how teachers will respond after several years of following the "script."

A staff must be free to develop or employ any dynamic curriculum that it believes will match the needs of the children, so long as that curriculum provides adequately for staff involvement and facilitates the type of program operation desired. The process of creating and the creative application of a curriculum, not the particular curriculum selected or developed, is what is essential to success. In preschool education the process of re-inventing the wheel is important not for the wheels produced but for the learning the process engenders.

The curriculum is for the teacher not the child. The primary roles of curriculum are (1) to focus the energy of the teacher on a systematic effort to help the individual child to learn, (2) to provide a rational and integrated base for deciding which activities to include and which to omit, and (3) to provide criteria for others to judge

program effectiveness so that the teacher may be adequately supervised. The successful curriculum is one that permits this "structuring" of the teacher to guide her in her interaction with the child from the perspective of the curriculum theory. An unsuccessful curriculum is one that permits the teacher to give her energies to areas unrelated to her interaction with the child within the theoretical framework or fails to give her clear guidelines for using her time in planning, in interaction with children, and in availing herself of critical supervision. The global and imprecise nature of the traditional preschool curriculum may explain why the master teacher's careful observation of the child and intuitive response to his needs is so successful, while the typical teacher, lacking structured guidelines, mistakes efficient organization at best and systematic neglect at worst for creative education.

Broad curricula are functionally equivalent. As far as various preschool curricula are concerned, children profit intellectually from any curriculum that is based on a wide range of experiences. A child has the potential to develop cognitive skills and good educational habits if he is presented with a situation which requires their expression. Kohlberg (1968) concludes that a child needs broad general forms of active experience for adequate development of his cognitive abilities; a variety of specific types of stimulation are more or less functionally equivalent for development. In short, no specific curriculum has the corner on effective stimuli, and children are powerful enough consumers to avail themselves of what the market offers.

The staff model is more important than the particular curriculum employed. While competent administrative direction and a good curriculum are important in achieving success, staff involvement is crucial. The staff model must allow each individual to be creatively involved in the total operation. In an almost romantic sense, the human involvement of concerned teachers and staff is the key element in program success. To achieve such involvement, a project must provide time for the staff to plan what they are going to do within the restrictions demanded by the curriculum, and it must provide for critical supervision by experienced personnel.

THE STAFF MODEL

The curriculum activities employed in preschool classrooms attract most of the attention given to preschool education. When educators or parents inquire about a particular preschool program, the most frequent request is for specific information concerning the curriculum used by the project. When preschool teachers gather at workshops or conferences, the general focus is on activities employed in the classroom, e.g., music for preschoolers, pets as a preschool unit, etc. When parents visit the preschool for orientation or when they have questions about the school, the day-to-day activities attract their interests and concern. There are many reasons for this focus on curriculum. Most teachers believe that it is the specific preschool curriculum activities which produce the most beneficial experience for children. Curriculum activities are a series of concrete acts easily observed by parents and others concerned with the development of the child; teachers find it most helpful to talk about concrete suggestions which are easily understood, employed, and then either incorporated into the program or discarded for alternative activities. If staff or parents are dissatisfied with the way a particular program is working, the common sense step is to change what is being done and to try another series of specific activities. Curriculum, then, is the most accessible part of preschool operation.

Implicit in this traditional view of curriculum is the assumption that there is a correct method (curriculum) to be employed which has a direct relationship with educational outcome. Employ the same activities as a master teacher or a program which "works" and you will obtain the same results with the children. Use this particular set of records and the child will learn body image; use this group of lotto games and language will improve. However, as stated in the first section of this paper, the data from the Curriculum Demonstration Project suggest that a good curriculum alone is not sufficient to guarantee an adequate and productive preschool experience for young children. The specific curriculum employed is only part of the program. Critical, and perhaps even more essential than the curriculum itself is the way in which the preschool staff functions to produce a preschool experience, that is, the way in which the staff handles the day-to-day demands made on themselves and on the children. These conditions for operation are called the <u>staff model</u>, the most important components of which are:

(1) Involvement of the teacher in <u>planning</u> within the curriculum framework

(2) Participation in the give and take of a team teaching situation

(3) Supervision by a knowledgeable curriculum supervisor

PLANNING. In a structured curriculum, the classroom teacher is the essential element in the success of the program. Teachers do best with activities they have created for the use of the particular children enrolled in their program. Curriculum "scripts" of what to think, what to say, and how to put a particular goal into operation should be categorically rejected. Instead, the curriculum might offer a series of goals to guide classroom activity planning. Given this absence of prescription, planning becomes an extremely important function of the teacher. Successful planning means that the teacher works within the curriculum framework, is willing to focus her attention on key issues, and devotes sufficient time to the process of planning.

Planning in the structured preschool program is difficult because it requires a knowledge of the theoretical framework upon which the curriculum is based. For example, Piagetian developmental theory is difficult to comprehend and does not lend itself to rapid integration with the traditional concerns of the preschool teacher. Indeed, it is not directly concerned with education at all. Yet it gives depth and breadth to a program, and generalizations from it can give the teacher a way to attack most educational problems faced in the classroom.

Planning within a theoretical framework is also difficult because acceptance of the framework places restrictions on the teacher. What the theory has to say about the way a teacher should teach and the process by which a child learns limits the teacher's choice and utilization of curriculum activities. Not just anything will do. In fact, it is generally difficult for teachers new to a structured program to evolve teaching activities adequately related to the curriculum theory.

Planning provides an opportunity for the teacher to think about key issues of curriculum operation within the program. A major problem faced in any preschool is the use of time by both the children and the teacher. While ample opportunity should be provided for the individual child to explore curriculum-related materials on his own, a teacher must be very active in the pacing of the program

to make full use of the time spent in school. Careful advance planning will assist the teacher in reaching this objective. What is the exact goal each activity is aimed at? What are the indications that each youngster has attained the level of academic performance appropriate to his overall development? What simpler or more difficult alternative activities are ready for possible use? What are the key words and skills that all of the staff, teachers and aides, will seek to employ during a particular unit of curriculum focus? Advance planning gives the basic plan of action to be followed by all staff. It "tags" waste time which can be eliminated, as when groups of children stand in line waiting to go somewhere or nowhere.

Planning provides occasion to focus on elements that may be overlooked when the "teacher is playing it by ear." For example, how many decisions can be made by each child during the activity being offered? Does the planned activity permit each child to be actively involved so that he learns by doing? Making pancakes on an open hotplate can be designed, with adequate planning, to give each child a chance to actively participate in the steps involved. For example, if each child mixes his own batter in his own cup, he has many decisions to make; on the other hand, a cake placed carefully in an oven by the teacher or a single child does not provide the opportunity for decision making by each individual in the group.

Planning also permits the teacher to build in opportunities for children to "be in charge," to direct themselves, and to teach each other: "John, you made the first pancake, you help Mary with the second." Now John has to make many decisions on how to help Mary.

Through planning, an educational focus may be given to all classroom problems, including discipline. The classroom environment and routine, correctly implemented, structure the child's behavior; that is, areas of activity are clearly defined for the child, and he knows what he can or cannot do within an area. The routine clearly tells him what is going to happen and when it is going to happen. The most important question asked during a planning session is, How can the instructional program be adapted to the level at which a particular child is operating? With this kind of focus, there is seldom any need for additional disciplinary measures.

Given the range and importance of the teacher's planning responsibilities, it is obvious that sufficient time for preparation must be allotted to her in the weekly work schedule. Plans should be prepared at least one week in advance. Time for evaluating the results of the plans should be included in the planning-documenting system.

In actual program operation there is usually resistance from the staff to detailed planning. It is easier to respond to the myriad day-to-day problems as they occur than to allot adequate time for planning. Basically, a staff member must learn to let the bulletin board go, avoid that extra administrative nicety, and focus directly on program goals. Planning in detail by teachers is the most essential component of successful preschool operation. It is a difficult task, but it is the only way to obtain the desired levels of intellectual growth in young children.

TEAM TEACHING. Teachers, aides, and volunteers working together in a classroom and sharing educational goals, methods, and outlook constitute a teaching team.

On the whole, a preschool classroom staff functioning in a team teaching setting is in a better position to produce superior programming than a staff working within a clearly defined hierarchy. The general tendency of any project designed for efficient operation is to organize staff into levels of professional responsibility. This "table of organization" may be a natural outcome of professional experience and aspirations and a need for clear-cut assignment of responsibility, but it may also prevent successful programming. In a preschool operation it is essential that all members of the staff attend to the problems of education within the preschool classroom. The teaching team should be the center of an ongoing forum where the staff can discuss curriculum theory and adjust the curriculum to the individual needs of the children. The teaching team itself can monitor the teaching behavior of each member, develop new and creative activities in accordance with curriculum theory, and in general focus upon the key issues that must constantly be kept before the total staff.

When a hierarchical type of preschool staff model (with each staff member assigned a clear-cut function along levels of professional responsibility) is the result of group planning, subject to ongoing group decision making, superior programming may result. On the other hand, if the organization results in a you-don't-criticize-me-and-I'll-not-criticize-you attitude, then the program will deteriorate. For example, one such preschool project had four teachers

handling a group of twenty-eight children. The teachers agreed to differ in their approaches and curriculum methods. What developed was serial teaching; first one teacher, then another, would conduct the class, and an implicit agreement was reached not to do anything that would upset any other teacher. That is not true team teaching. A better alternative is for the team to develop parallel teaching activities: teachers and aides teach simultaneously, and all work from a master plan developed during the planning sessions and drawn from the best thinking the group can produce.

It is essential that team teaching be used as the basis for mutual development and program improvement. How do we best use this idea next week? What are the adjustments we can make for Charles and Mary? Will you observe me when I try this new classification lesson? Will you help me think of two more activities like this one at the index level? Team teaching is difficult because it is hard to turn differences of opinion about school operation into constructive program development and self-education. It is hard to avoid personality clashes and authority and control competition. Yet it is the struggle to produce a competent and integrated program that will result in a superior preschool. Smooth and agreeable operation seems to produce a program that is dull in application and has minimal stimulation for and limited impact upon both the children and the staff. Somehow, the struggle to be effective, when focused on the child and his educational needs in the preschool situation, is what produces success. Problems provide the material that engenders superior thinking on the part of concerned staff.

A functioning team is an excellent source of inservice training. Teachers working together have an ideal opportunity to observe children responding to specific lesson and program ideas. They begin to specialize in curriculum areas of special concern to them, and the information thus gained is passed on to the others in the program, creating an intellectual challenge directly related to real concerns of the teaching staff. The constructive criticism that results will lead to improved teaching performance.

Classroom aides must be included in this process of give and take. Aides frequently do not have an extensive formal education, and often their expectations for the children differ from those of the teachers, especially in the area of classroom discipline. The task of honestly explaining the rationale for the classroom program and the concrete extension of theoretical ideas into actual practice are excellent learning experiences for both aides and teachers.

Teams of teachers and aides who have developed an adequate system of operation permitting honest and open personal re.ationships and candid appraisal of program implementation have developed a powerful tool. As mentioned above, the team can be the center of a forum for discussion of curriculum theory. Reading Piaget sounds like a difficult task, and it is, but discussion of curriculum ideas derived from this reading can generate excitement about classroom teaching and whole new realms of productive activities.

SUPERVISION. Adequate supervision is the most essential ingredient of the preschool staff model. Effective planning with careful focus on classroom educational problems and team teaching that fully implements the plans are made possible through adequate supervision. Supervision provides support to the teaching staff through assistance with classroom educational and operational problems, inservice training in the curriculum theory, "advice and comfort" in coping with the administrative structure, and direct facilitation of decision making. The supervisor should be an experienced teacher who has learned the curriculum through inservice training and direct experience in the classroom.

The supervisor is not an administrator and spends little time in any administrative function. This restriction is absolutely critical. If the supervisor must give time to administrative matters such as attendance, staff policies, community liaison, ordering supplies, then she will not be able to provide the support necessary for successful operation of the program.

While the supervisor must fend off both the temptation and the pressure to be involved in administrative work, it is important for her to present the teaching problems to the administrative group. The supervisor must be willing to speak out for the team and to identify forcefully to the administrators the problems that the teachers feel are real. For example, one problem that a group of preschool teachers faced in a small rural schoolhouse was rodents in the building. The administrators thought the problem was (a) to be expected in a small rural school, (b) typical--you can't keep them out anyway, (c) short term--when it gets cold they won't be so active, and (d) just like a bunch of women to complain about a mouse or two. The supervisor was the individual who said that, regardless of all the "masculine" reasons office-bound administrators wanted to offer, the problem was real for the team and therefore it had to be resolved. The "rodent invasion" was actually never satisfactorily resolved, but from the teacher's point of view the fact that an effort was finally made by the administrators was sufficient to satisfy them.

The major task of the supervisor is to give direct assistance to the classroom team by underscoring the real problems in the classroom. To accomplish this goal she reviews the plans the teachers have prepared, observes in the classroom for extended periods of time, and arranges for videotapes to be taken of key lessons. The supervisor can raise questions for the staff about the program operation, planning, and teaching functions. In addition, she is the "referee" for the many problems within the team, bringing the difficulties out into the open rather than allowing them to be smoothed over; since genuine program difficulties with individual children and among staff are the basis for program improvement, to smooth them over is to avoid the opportunity they provide.

From the knowledge and overview the supervisor gains in giving direct assistance to the classroom team, an adequate inservice training program can be developed specifically for that team. Discussion of lesson plans and application of those plans lead naturally into discussion of the theory the curriculum is based on. Demonstration teaching by the supervisor can give team members an opportunity to watch their children reacting to planned curriculum lessons. The videotapes, while devastating at first to anyone who has not seen himself on tape before, can serve as an excellent training device for teachers. The supervisor can use the occasion to focus upon teaching problems and introduce solutions from the curriculum teaching framework. There is little need to bring in "outside experts" throughout much of this inservice training. A well supervised staff that actively questions, that constantly searches for ways to be more effective with children by watching their actual behavior within the classroom setting, and that takes an honest look at themselves and their commitment to planning team teaching, has ample knowledge and resources to ask the right questions and develop the right activities within the framework of the curriculum.

The role of the supervisor is often accepted with considerable hesitation by administrators, teachers, and supervisors themselves. Just why is the term "supervisor" used and doesn't that imply an authoritarian role? Actually, any term can be used, and some projects use such terms as "program assistant" or "curriculum assistant." However, the function is the same: the supervisor is clearly responsible for holding the teachers to the instructional tasks at hand, raising appropriate questions, and helping teachers find educational solutions within the curriculum framework. The supervisor

serves as the balance wheel in the operation of the curriculum, maintaining, through supportive services, dedication, and knowledge, the momentum that the staff has generated.

CONCLUSIONS. Long-term educational impact is an unusual outcome for preschool programs. While most programs look good from the outside because the children seem involved, because teachers can state how they are meeting the needs of the children, because parents say they think the program is good for their children, and because outside consultants find that all the appropriate words are being used, such as, "meeting the child's needs and providing for his social and emotional growth," the facts are that most programs do not produce any lasting impact upon most children. For a solution to this vexing problem, the search has been directed toward new preschool curricula. But, in this section, the staff model has been presented as a critical aspect of any successful operation. A good curriculum is important, but the way in which the curriculum is put into operation determines the outcome. Planning is often seen by professional teachers (and others) as harking back to student teaching days. Planning in detail with team members and then discussing the plans with a supervisor sounds as though one never went to college or learned anything about children. Yet it is just this exposure' to constant self-development and supervision that protects the program, the children, and teachers from stagnation. Supervision is frequently left out of a "good" operation when teachers have learned to cope with almost insurmountable problems. The point at which failure begins, though, is when education shifts to training, and problem solving to routine performance.

A Parable

Once upon a time there was a Head Start Teacher who lived in a Great City. The call went out for teachers to serve in a new center in a Great City Vertical Slum (government housing project) where the conditions would be less than ideal but where one could give of oneself. The Teacher, who told others she was a Master Teacher since she had a master's degree, answered the call and took charge of an important classroom component in the project. She was greatly concerned about her job and most dedicated

to it. She had almost 30 children in a space that was too small, she had a cook for the lunch program, she had aides and an assistant teacher to help run the program, she had mothers in the classroom to assist with meals and to observe their children, she even had student volunteers from the neighborhood school. Her responsibilities were great. She had to train her staff, operate the feeding program, supervise the aides, counsel the volunteers, and, of course, teach the children. To meet these responsibilities she worked hard and with much originality.

In order to survive, the Head Start Teacher trained the assistant teacher to handle the children. She trained the aides to help the assistant teacher. She requested and received assistance in operating the lunch program. She held group meetings for the mothers. She gained the cooperation of the volunteers. She even took the mothers out to suburban shopping centers to buy food because of the low prices there as compared to their slum supermarket's. The program received praise from all as an example of how a good preschool program is operated.

One day, the Head Start Teacher talked to a group of Great Men from Washington. She told them all she had done and how difficult it was and how important she felt the experience was for the children. And when she finished, one of the Great Men asked her how she had ever managed to do all of these things. She replied that it had been very difficult, especially for the first few weeks, but then she had got the "knack" of it and was able to organize everything to run smoothly. And the Great Men felt that they had seen something Good.

The Great Men had indeed seen something Good, but it is questionable whether they had seen something likely to benefit the children. They had seen a hierarchical preschool organization functioning smoothly, efficiently, and providing services to the parents and community. But the teacher had "got the knack," and the program was so well organized, responsibilities were so efficiently delegated that the staff had probably reached the point where it was no longer involved in the daily struggle to meet the needs of the children. This is what generally happens in education. At first each teacher has

great difficulty bringing order out of the chaos of problems facing her program. Eventually, however, the organizational problems are mastered and the teachers settle down to a comfortable teaching routine in which neither they nor the children are challenged. The learning opportunities for the children decrease dramatically as the struggle to cope with the unforeseen is replaced by efficient organization.

Just as operational efficiency limits the amount of thinking and learning on the part of teachers, so it does on the part of children. If opportunity for decision making is really important, then we cannot afford to "get the knack." The need is for detailed planning in a supervised team setting under conditions where all staff may participate in making decisions.

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